METHOD FOR FORMING AN ELECTRONIC DEVICE

Abstract of the Invention

Under the present invention, a layer of amorphous silicon is formed over a layer of gate dielectric. Over the layer of amorphous silicon, a gate cap dielectric is formed. The layer of amorphous silicon is then confined by at least one spacer, which is deposited under a low temperature process. Once the at least one spacer is in place, the amorphous silicon is exposed to a temperature sufficiently high to convert the amorphous silicon to polysilicon. By waiting until the amorphous silicon is confined within the at least one spacer before converting it to polysilicon, the variation in gate length is reduced